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REMARKS

I. The Amendments

Applicants have amended the specification to reflect the correct SEQ ID NOs with respect to identifying polypeptides useful according to the present invention. In addition, Applicants have amended the specification to correct a typographical error and formalities.

II. The Rejection of Claims 34-37 19 Under 35 U.S.C. §102(e) May Properly Be Withdrawn

Claims 34-37 were rejected under 35 U.S.C. §102(e) for being directed to subject matter assertedly anticipated by the disclosure of Fisher et al. (U.S. Patent No. 5,922,595; hereinafter "the '595 patent").

In response, Applicants attach herewith as Appendix A a declaration pursuant to 37 C.F.R. §1.131 which was filed during prosecution of parent application U.S. Serial No. 09/256,000, now U.S. Patent No. 6,350,603. The Applicant submits that, in view of the attached declaration, the '595 patent is an improper reference against the claimed subject matter. As evidenced by the declaration, the subject matter of the claims was conceived and reduced to practice at least as early as the effective filing date of the cited patent. Accordingly, the Applicant submits that the rejection of claims 34-37 under §102(e) must be withdrawn.

CONCLUSION

The amendments include no new matter. In view of the amendments and remarks made herein, Applicant believes that claims 34-37 are in condition for allowance and respectfully request expedient notification of the same.

Respectfully submitted,

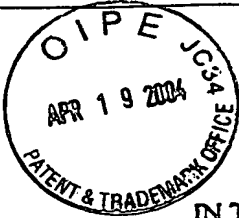
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By:



Eric M. Brusca
Reg. No. 52,664

April 13, 2004



PATENT

Attorney Docket No: 27013/35308

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Loughney, Kate

Serial No.: 09/256,000

Filed: February 23, 1999

For: Phosphodiesterase 10

Group Art Unit: 1642

Examiner: R. Hutson, Ph.D.

) I hereby certify that this paper is being
) deposited with the United States Postal
) Service as First Class mail, postage
) prepaid, in an envelope addressed to:
) Assistant Commissioner for Patents,
) Washington, D.C. 20231, on April 26,
) 2000.

Joseph A. Williams, Jr., Reg. No. 28,659

DECLARATION OF KATE LOUGHNEY, Ph.D., UNDER 37 C.F.R. §1.131

I, Kate Loughney, Ph.D., state that,

1. I am the sole inventor of the subject matter claimed in the above application which claims priority of U.S. Provisional Application Serial No: 60/075,508, filed February 23, 1998. I am making this declaration to provide evidence that the subject matter claimed in the above application was completed in the United States at a date at least prior to December 9, 1997, which is the effective filing date of U.S. Patent 5,922,595, cited by the Examiner in an Office Action mailed October 26, 1999.

2. To establish the date of completion of the invention, copies of pages from my laboratory notebook are attached as Exhibit A. Dates on these pages have been removed.

3. The first page in Exhibit A describes the plan for constructing an expression construct using previously isolated clone FB94a. Clone FB 94a is described at page 28, lines 23 through 24, to encode a complete open reading frame for PDE10.

5. The second page in Exhibit A describes steps for growing a host cell line transformed with the completed expression construct comprising the FB 94a sequence under control of the alcohol dehydrogenase promoter as described in the specification in Example 4.

6. Pages 3 through 6 in Exhibit A set forth the final sequence determined for clone FB94a.

7. From these laboratory notebook pages, it can be seen that the subject matter of the claims in the application was completed at least before December 9, 1997.

8. This declaration is submitted in response to a non-final Office Action.

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Kate Loughney 1/26/00
Kate Loughney, Ph.D. Date

From Page No. _____

to build expression construct pde 10.

use CDNA FB 97a.

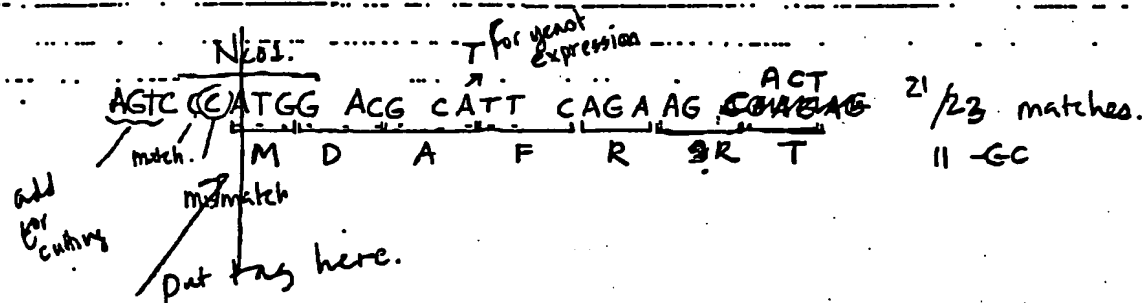
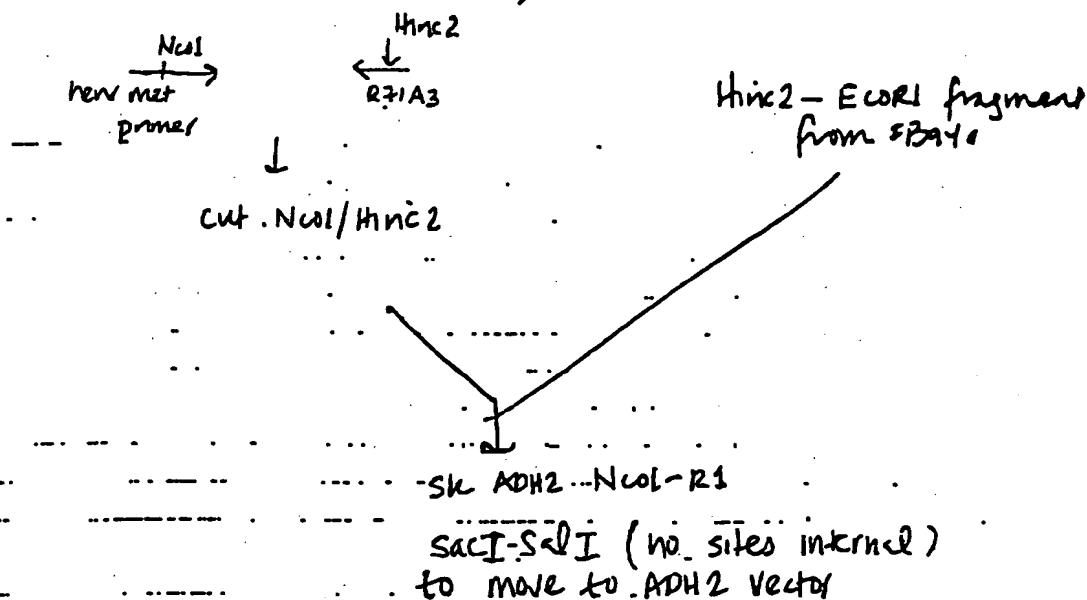
lacks yellow + green regions

Loss of yellow changes frames, uses 5' met in another frame.

M D A F R ~~R~~ + P Y K → as FB 76.2

Sequence cDNA to confirm.

use PCR to make exact 5' end.



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Witnessed & Understood by me.

Ray & Lisa

Date

[Redacted]

Invented by

Recorded by *Kate Loughney*

Date

[Redacted]

From Page No. 22

Growing pde 10

shrink sc-leu

O/N 5 ml 3c-leu

0.2 ml → 2x 120 ml sc-leu 3rd 30°C
O/N

→ spin

wash yep 3% glycerol

→ 100 ml w/107 cells yep 3% glycerol 10⁰⁰ AM x 2

— x 1.

12¹⁵ - spin out 15 g.

25.5hr +

25.5hr - 2

freeze in dry ice

22hr.

5¹⁵ - 3¹⁰

→ Lottar

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[Signature]

Date

[Signature]

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Kate Loughney

Date

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Book No. _____

TITLE FB94a. PDE1A final sequence

From Page No. _____

[Redacted] KL

Contig[0002]
Sequencher™ "fb94amac"

mc45116 fb882a1, 1 to 87

mc45117 r71a3, 1 to 323

mc44738 m13rev, 1 to 844

mc45118 fb882a1, 88 to 819

mc45119 r71a2, 123 to 723

mc45118 fb881 s1, 319 to 1118

mc45121 r71a4, 440 to 1139

mc45120 r71a1, 788 to 1453

mc44737 m13, 850 to 1548

mc45122 r71a2, 1188 to 1548

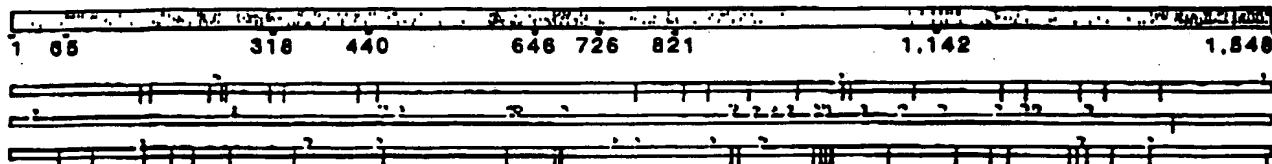


Diagram Key	
	Hole in contig
	Single fragment
	Multiple fragments same direction
	Both strands
	Both strands plus
	Start codon frame 1
	Stop codon frame 2
	Bumps on fragments show motifs, hollow rectangles show features

FB94a seq is finished.

[Redacted]

To Page No. _____

Viewed & understood by me:

Neil Hays

[Redacted]

Invented by

Recorded by

Kate Loughney

Date

[Redacted]

From Page No.

fb94a final

inserted in FB94a 2 one of these 2 places.

CCCAAGGCCATCTACCTGGACATCGATGGACGACATTCAGAACTCCGTACAAAGTGAG 60
P K A I Y L D I D O R I Q K H S V Q S E
P R P S T W T S ²⁶ D A F R S T P Y K V R
Q G H L P O H R W T H S E A L R T K * D
ACCTGTGGCCATCAAGCAACTCTCCGAGAGAGAGAAATTAATCAGAGCGTCTGGCGCA 120
T C G H Q A T L R E R R I M P E R A G A
P V A I K Q L S E E E E L I Q S V L A Q
L W P S S H S P R E E K N * S R A C W R R
GGTTGCAGAGCAOTTCTCAAGAGCATTCAAAATCAATGAACTGAAAGCTGAAGTTGCAA 180
G C R A V L X S I Q W Q * T E S * S C K
V A E O F S R A F K I N E L K A E V A N
L Q S S S O E H S K S M N * K L K L Q I
TCACTTGGCTCTCTAGAGAAACGCTGGAATTGGAAGGACTAAAAGTGGTGGAGATTGA 240
S L O C P R E T R G I G R T K S G G D *
H L A V L E K R V E L E G L K V V E I E
T W L S * R N A W N W K D * K W W R L R
GAAATGCAAGAGTGACATTAAGAAGATGAGGGAGGAGCTGGCGGCCAGAAGCAGCAGGAC 300
E M Q E * H * E D E G G A G G Q K Q Q D
K C K S D I K K M R E E L A A R S S R T
N A R V T L R R * G R S W R P E A A G P
CAACTGCCCCCTGTAAGTACAGTTTTTTGGATAACCACAAGAGTTGACTCCTCGACGCGA 360
Q L P L * V Q P F G * P Q E V D S S T R
W C F C K Y S F L D N H K K L T P R R D
T A P V S T V F W I T T R S * L L D A M
TGTTGCCACTTACCCCAAGTACCTGCTCTCTCCAGAGACCATCGAGGCCCTGCGGAAGCC 420
C E M L P Q V P A L S R D H R G P A E A
V F T Y P K Y L L S P E T I E A L R K P
P F L T P S T C S L Q R P S R P C G S R
GACCTTTGACGTCTGGCTTTGGGAGCCCCAATGAGATGCTGAGCTGCCTGGAGCACATGTA 480
D L * R L A L G A Q * D A E L P G A H V
T F D V W L W E P N E M L S C L E H M Y
P L T S G F G S P M R C * A A W S T C T
CCACGACCTCGGGCTGGTCAGGGACTTCAGCATCAACCCTGTCCACCCTCAGGAGGTGGCT 540
P R P R A G Q G L Q H Q P C H P Q E V A
H D L G L V R D F S I N P V T L R R W L
T T S G W S G T S A S T L S P S G G G C
GTTCTGCGTCCAGCAACTACAGAAACAACCCCTTCCACAACCTTCGGCACTGCTTCTG 600
V L R P R Q L Q K Q P L P Q L P A L L L
P C V H D N Y R N N P F H N F R H C F C
S A S T T T T E T T P S T T S G T A S A

To Page No.

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[Signature]

Date

Invented by

Date

Received by

Kate Loughnay

Project No. _____

Book No. _____

Title _____

FB94a-PDE10-final sequence

com 214

CGTGGCCAGATGATGTACAGCATGGTCTGGCTCTGCAGTCTCCAGGAGAAGTTCTCACA 660
R G P D D V Q H G L A L Q S P G E V L T
V A Q M M Y S M V W L C S L Q E K F S Q
W P R * C T A W S G S A V S R R S S H K

AACGGATATCCTGATCCTAATGACACGGCCATCTGCCACGATCTGGACCATCCCGGCTA 720
N G Y P D P N D S G H L P R S G P S R L
T D I L I L M T A A I C H D L D H P G Y
R I S * S * * Q R P S A T I W T I P A T

CAACAACACGTACCAGATCAATGCCCCACAGAGCTGGCGGTCCGCTACAATGACATCTC 780
Q Q H V P D Q C P H R A G G P L Q * H L
N N T Y Q I N A R T E L A V R Y N D I S
T T R T R S M P A Q S W R S A T M T S H

ACCGCTGGAGAACCACCACTGCGCCGTGGCCTTCCAGATCCTCGCCGAGCCTGAGTGCAA 840
T A G E P P L R R G L P D P R R A * V Q
P L E N H H C A V A F Q I L A E P E C N
R W R T T T A P W P S R S S P S L S A T

CATCTTCTCCAACATCCACCTGATGGGTTCAAGCAGATCCGACAGGGAATGATCACATT 900
H L L Q H P T * W V Q A D P T G N D H I
I F S N I P P D G F K Q I R O G M I T L
S S P T S H L M G S S R S D R E * S H *

AATCTTGGCCACTGACATGGCAAGACATGCAGAAATTATGGATTCTTTCAAAGAGAAAAT 960
N L G H * H G K T C R N Y G F F Q R E N
I L A T D M A R H A E I M D S F K E K M
S W P L T W Q D M Q K L W I L S K R K W

GGAGAATTTTGACTACAGCAACGAGGAGCACATGACCCTGCTGAAGATGATTTTGTATAA 1020
G E F * L Q Q R G A H D P A E D D F D K
E N F D Y S N E E H M T L L K M I L I K
R I L T T A T R S T * P C * R * F * * N

ATGCTGTGATATCTCTAACGAGGTCGGTCCAATGGAAGTCGAGAGCCTTGGGTGGACTG 1080
M L * Y * L * R G P S N G S R R A L G G L
C C D I S N E V R P M E V A E P W V D C
A V I S L T R S V Q W K S Q S L G W T V

TTTATTAGAGGAATATTTTATGCAGAGCGACCGTGAGAAGTCAGAAGGCCTTCTGTGGC 1140
F I R G I F Y A E R P * E V R R P S C G
L L E E Y F M Q S D R E K S E G L P V A
Y * R N I L C R A T V R S Q K A F L W H

ACCGTTCATGGACCGAGACAAAGTGACCAAGGCCACAGCCCAGATTGGGTTCATCAAGTT 1200
T V H G P R Q S D Q G H S P D W V H Q V
P F M D R D K V T K A T A Q I G F I K F
R S W T E T K * P R P Q P R L G S S S L

TGTCCTGATCCCAATGTTTGAAACAGTGACCAAGCTCTTCCCCATGGTTGAGGAGATCAT 1260
C P D P N V * N S D Q A L P H G * G D H
V L I P M F E T V T K L F P M V E E I M
S * S Q C L K Q * P S S S P W L R R S C

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Date _____

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Kate Woughney

FB94a - PDE10 - final sequence

Page No. _____

GCTGCAGCCACTTTGGGAATCCCGAGATCGCTACGAGGAGCTOAGCGGATAGATGACGC 1320
A A A T L G I P R S L R G A E A D R * R
L Q P L W E S R D R Y E E L K R I D D A
C S H F G N P E I A T R S * S G * M T P

CATGAAAGAGTTACAGAAGAAGACTGACAGCTTGCCTCTGCGGCCACCGAGAAOTCCAG 1380
H E R V T E E D * Q L D V W G H R E V Q
M K E L Q K K T D S L T S G A T E K S R

* K S Y R R R L T A * R L G P P R S P E
AGGAGAGCAGAGATOTGAAAAACAGTAAAGGAGACTOTGCTGAGGAAAGCGGGGGC 1440
R E K Q R C E K Q * R R L C L R K A G G
G R S R D V K N S E G D C A * G K R G A
G E A E M * K T V K E T V P E E S G G R

in FB76.2
checked in FB94 and in FB76.2
poly-morphism
GTGCTGCAGTTCTGGACCGGCTGCGCCGAGCTGCGCGGATCCTTGTGCAGGGAAGAGCT 1500
V A A V L D G L A E L R G I L V Q G R A
W L Q F W T G W P S C A G S L C R E E L
G C S S G R A G R A A R D P C A G K S C

GCCCTGGGCACCTGOCACCACAAGACCATGTTTTCTAAGAACCATTTT 1548
A L G T W H H K T M F S K N H F
P W A P O T T R P C F L R T I
P O H L A P Q D H V F * E P F

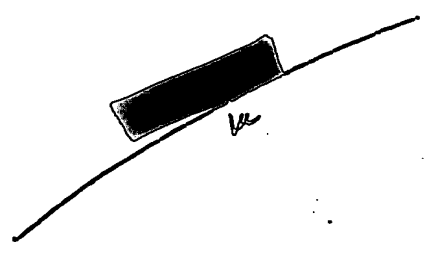
met at 26 - stop at N24.
466 a.a.
54367 Da

with flastag
475aa M-DYKDDDK-
55N43 PDE10.

when compared to other PDEs 29/50 match PDE4's.

HDLDHP → CNIF

24 match to rod a in same region w/gaps



Witnessed & Understood by me.

[Handwritten signature]

Date



Invented by

Recorded by

Kate Loughrey

Date



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